

Evaluating Growth and Transportation Options in the Metropolitan Washington Region

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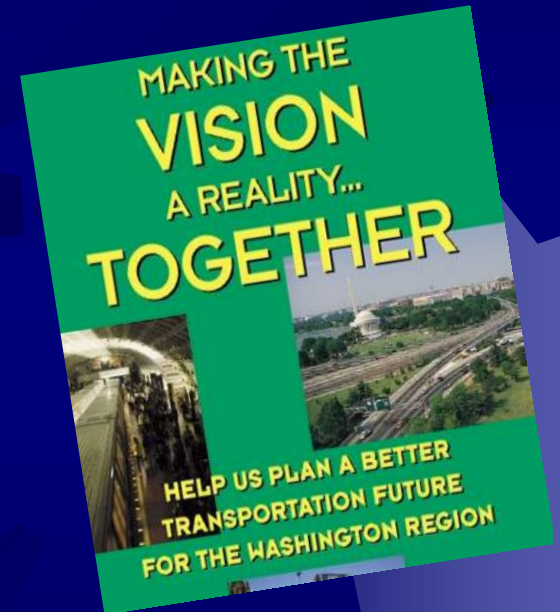


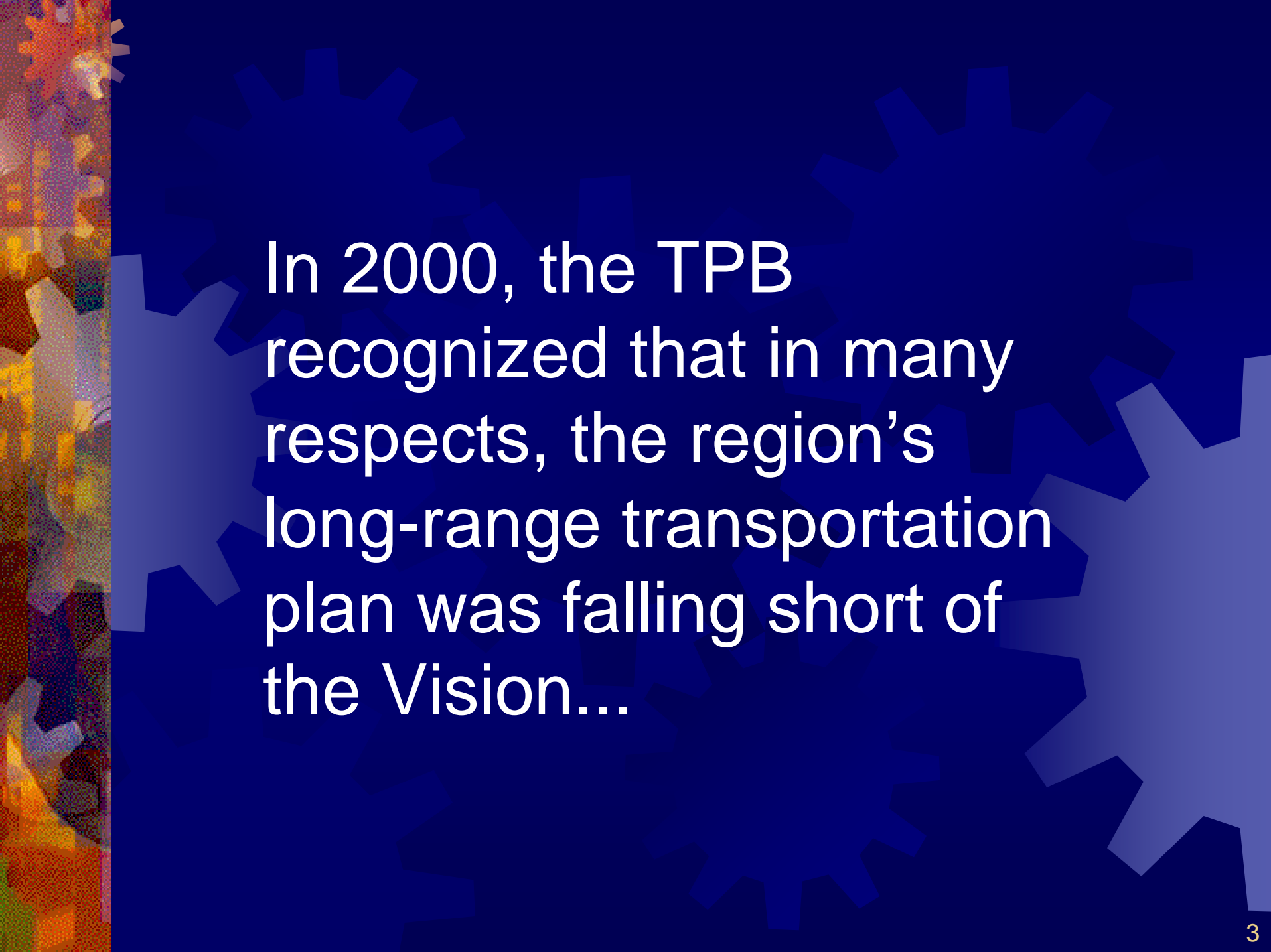
Transportation Accountability Commission
Outcome Measures Subcommittee Meeting
May 16, 2007

The TPB Vision

Approved in 1998

- A policy framework guiding the region's transportation investments in the 21st century.
- Goals include:
 - Promoting activity centers
 - Increasing transit use
 - Reducing driving



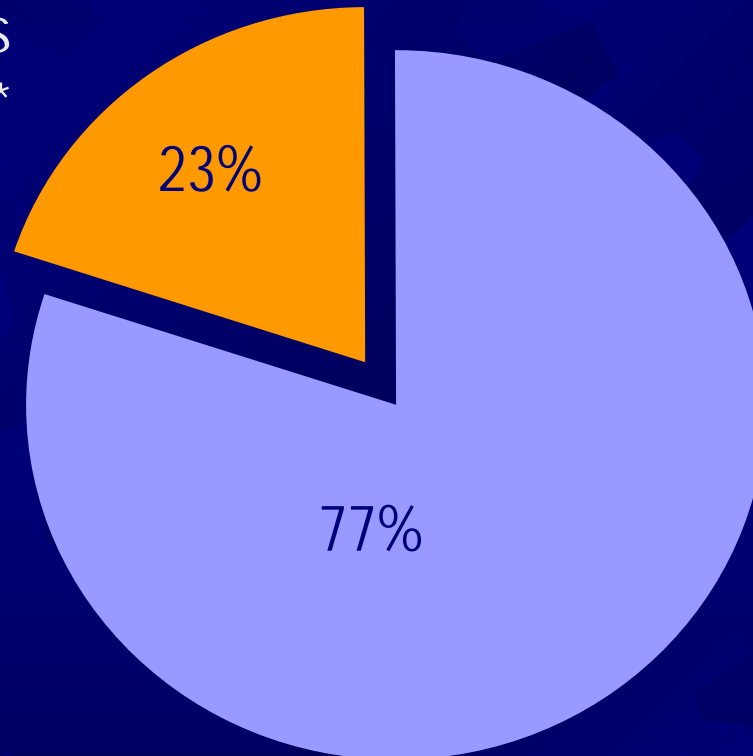


In 2000, the TPB
recognized that in many
respects, the region's
long-range transportation
plan was falling short of
the Vision...

Most Transportation Dollars Are Needed for Maintenance

Little money is available for new transportation projects

New Roads
and Transit*



Operations & Preservation*

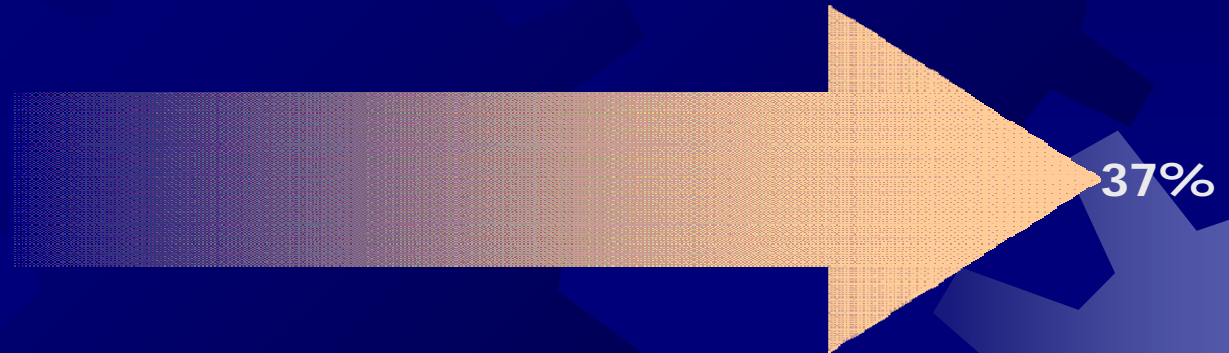
* Based on region's 2003 Constrained Long-Range Plan

The Highway System Won't Keep Pace with Growth

Forecast Trends 2000 - 2030

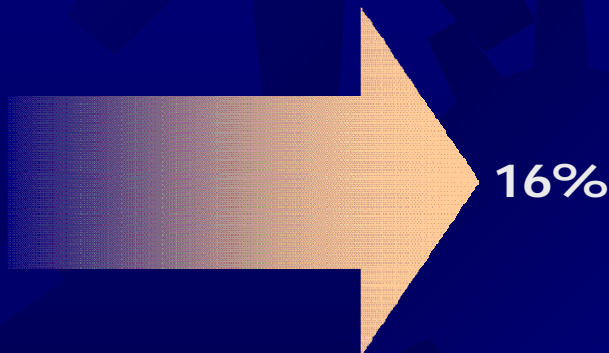
Daily Vehicle Miles Traveled

2000: 109 Million
2030: 150 Million



Freeway and Arterial Lane Miles

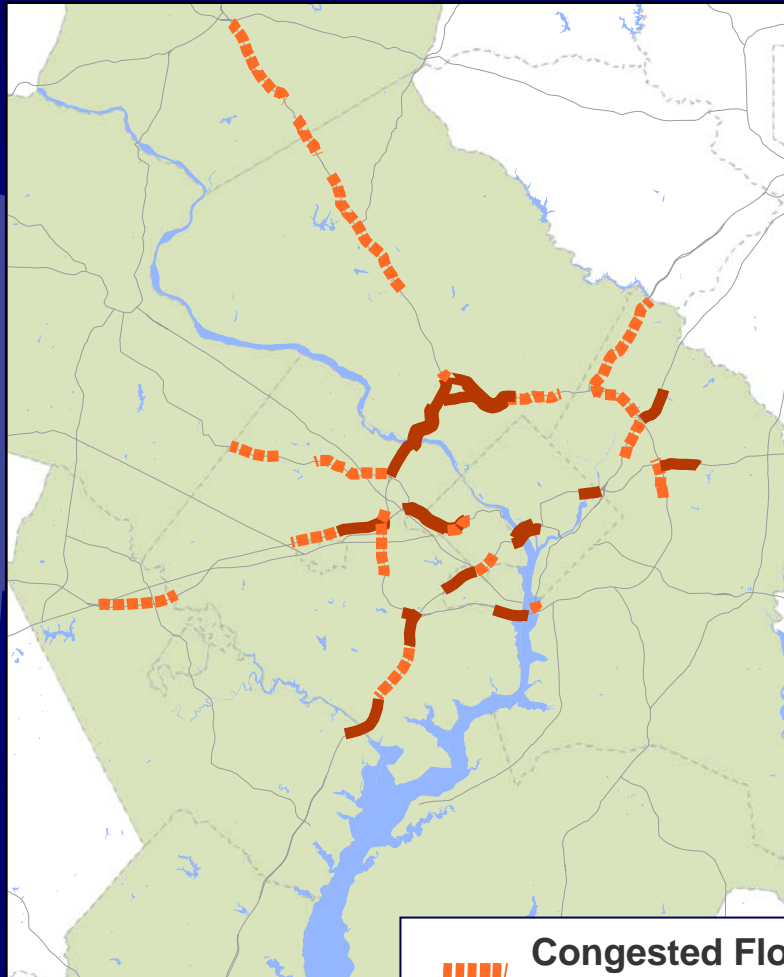
2000: 15,300 Miles
2030: 17,600 Miles



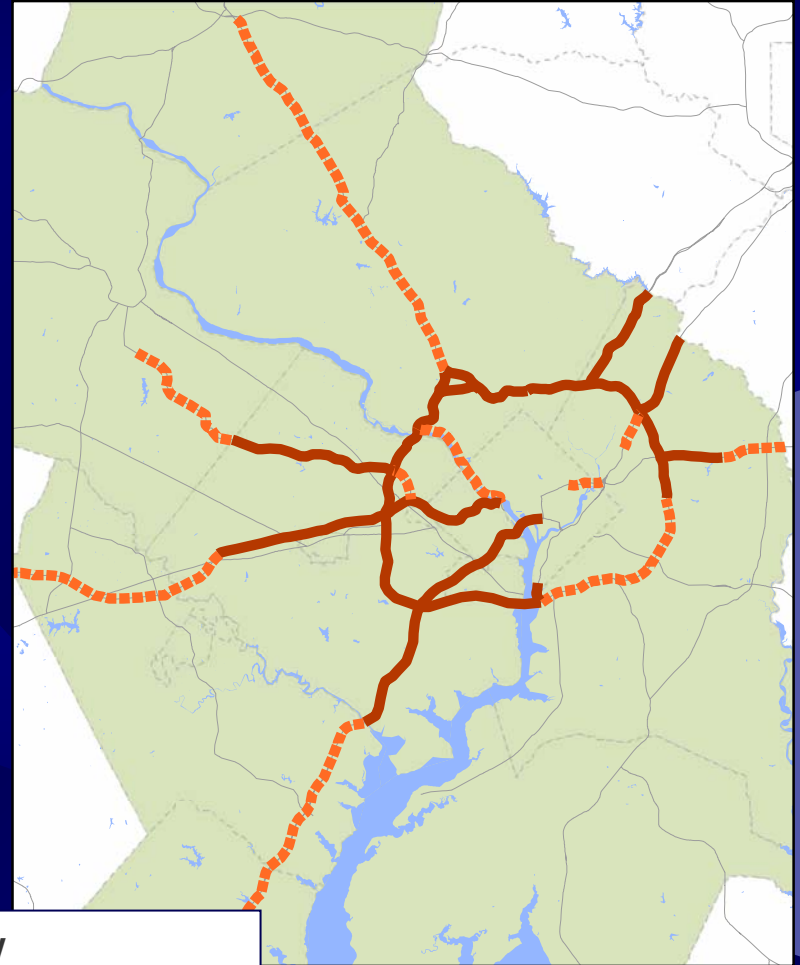
Based on region's 2003 Constrained Long-Range Plan

Most of the Beltway Will Be Stop and Go


Evening Highway Congestion 2000 and 2030




2000



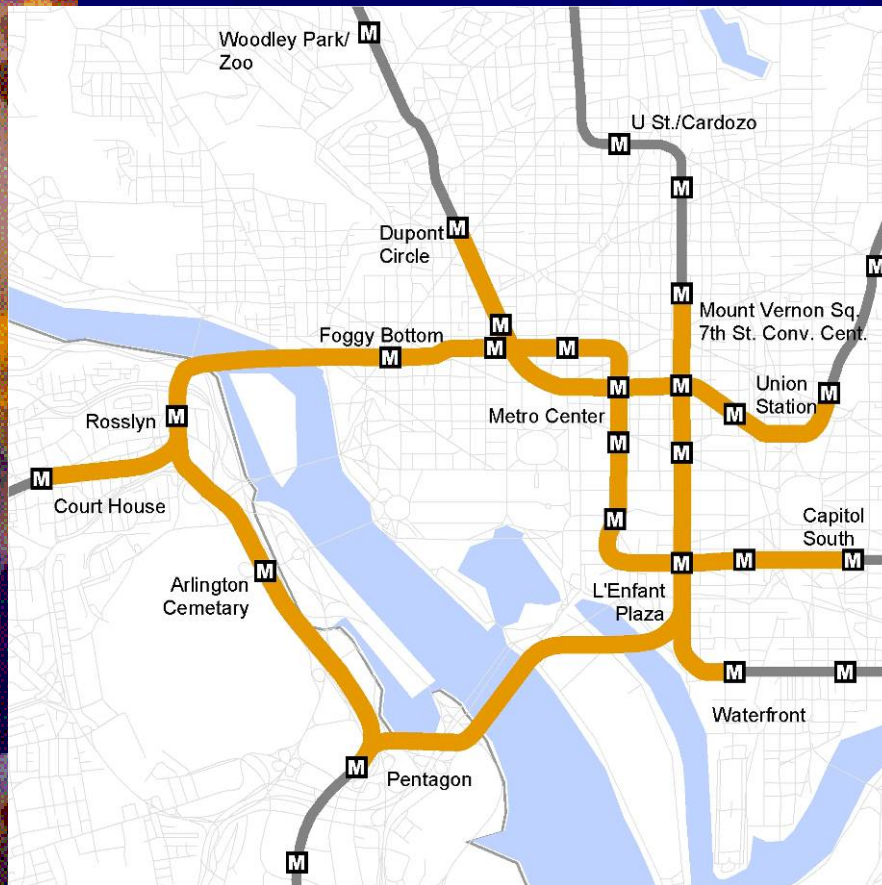
2030

 Congested Flow
(Average Speed 30 to 50 mph)

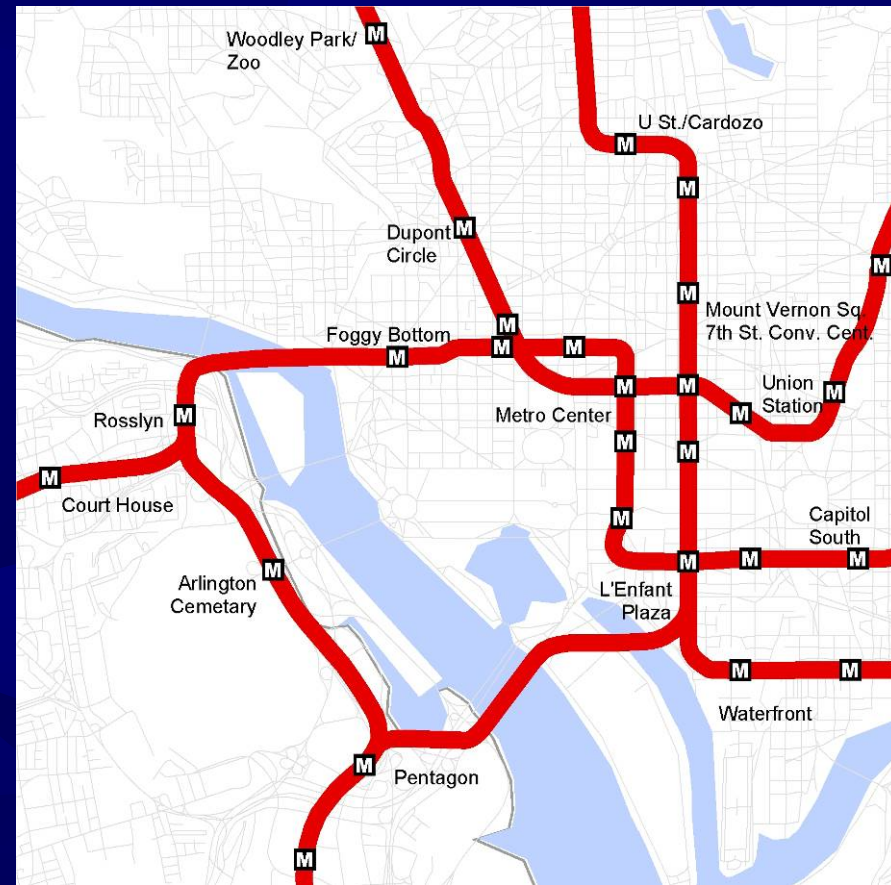
 Stop and Go Conditions
(Average Speed < 30 mph)

Metro Platforms and Trains Will Be Packed

Morning Peak-Hour Transit Congestion: 2000 and 2030



2000



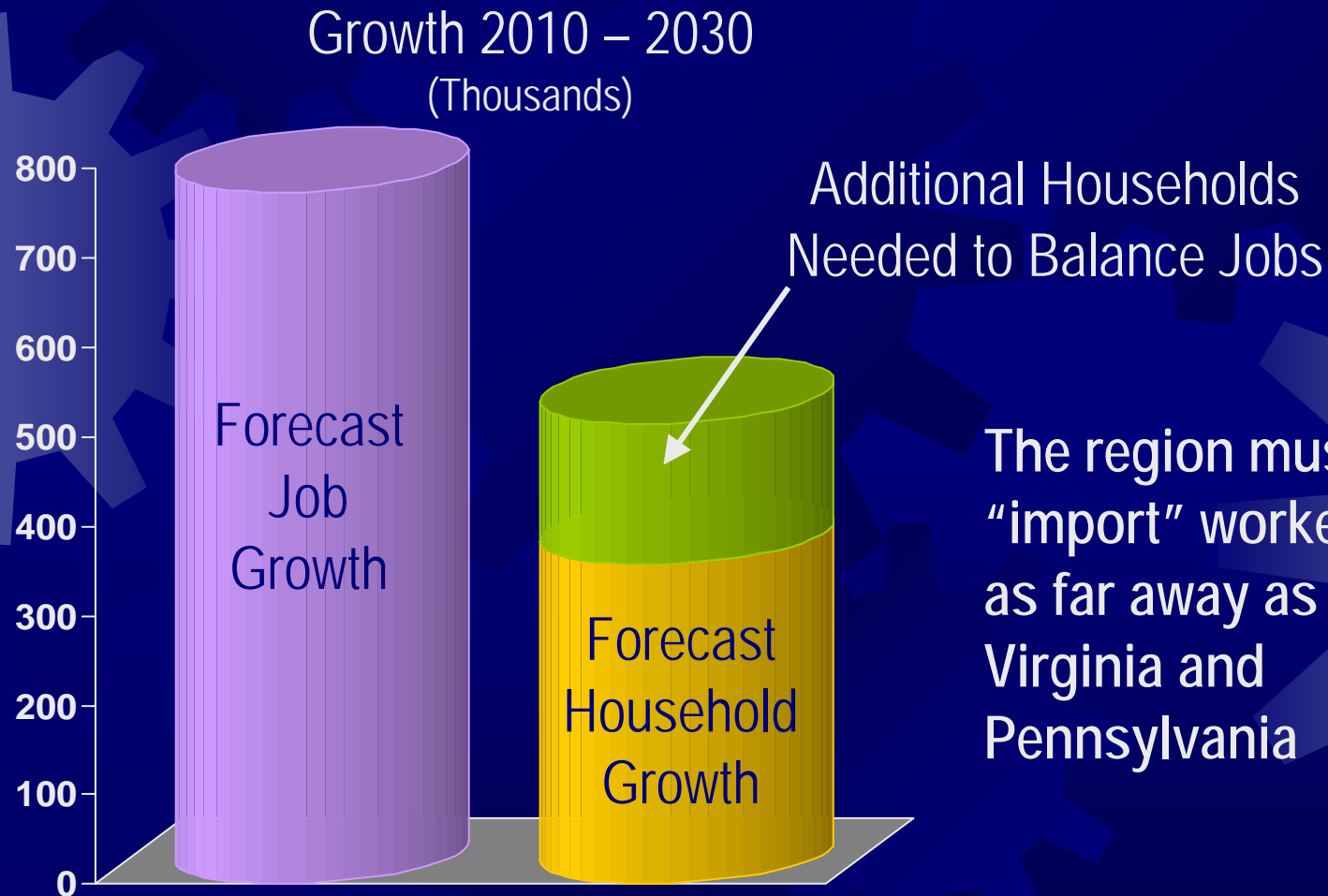
2030

 Congested
 Highly Congested

The background of the slide is a dark blue field filled with several large, semi-transparent gears of varying sizes. On the far left, there is a vertical strip of colorful, abstract, and pixelated patterns in shades of orange, yellow, and red. The text is centered in the middle of the slide.

What are **key** issues
related to land use and
transportation?

Issue #1: Job Growth is Outpacing Household Growth



The region must
“import” workers from
as far away as West
Virginia and
Pennsylvania

Assumes 1.5 Workers/Household

Issue #2: Workers are Living Farther Away from Their Jobs

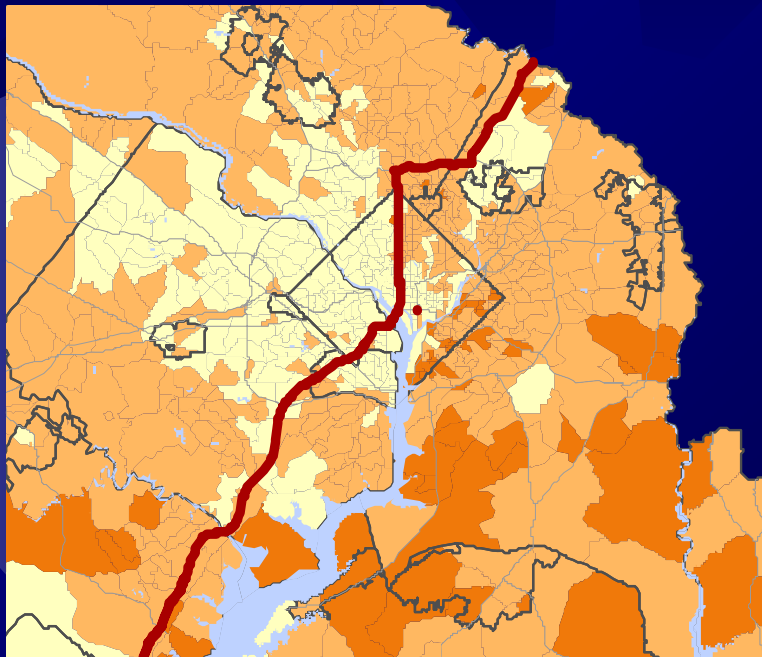
- ★ Inner jurisdictions – most job growth
- ★ Outer jurisdictions – lion's share of household growth

How Far Is Too Far?
Developer Plans 4,300 Homes 100 Miles From D.C.



Issue #3: East-West Divide

West-bound travel clogs the roads during morning rush hour

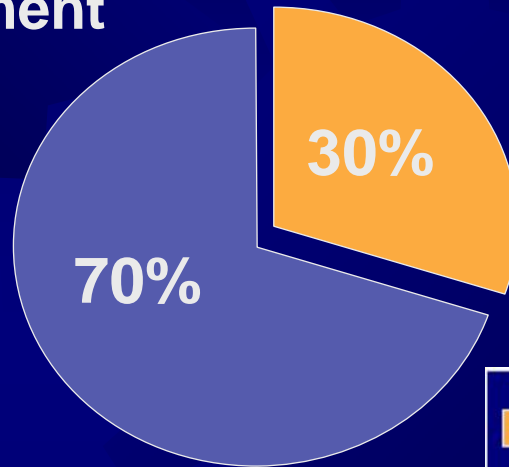


Average Commute Time

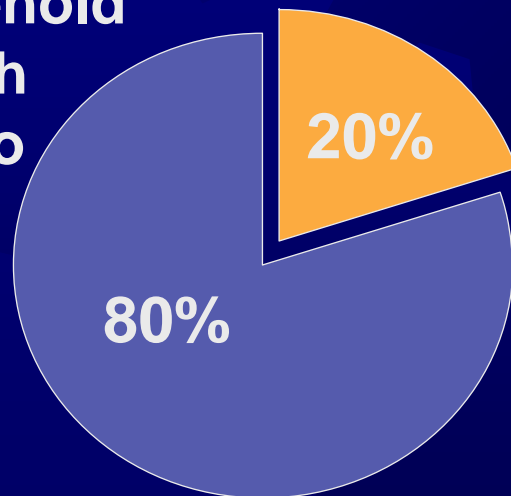


Issue #4: Most Growth Located Outside Transit Station Areas

**Employment
Growth
2010 to
2030**



**Household
Growth
2010 to
2030**



 **Inside Transit
Station Areas**

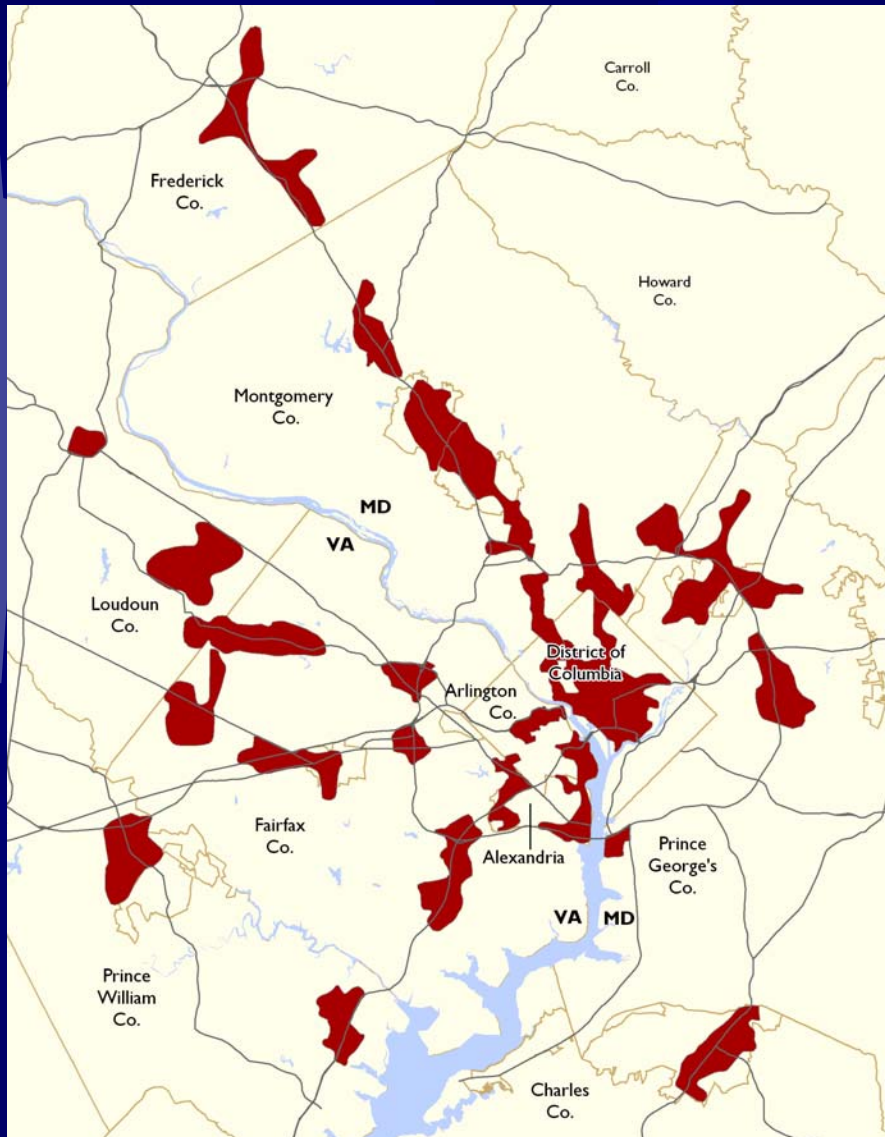
 **Outside Transit
Station Areas**



Study of “What If” Scenarios

- ✦ *What if* job and housing growth were shifted? *What if* new roads or transit were built?
- ✦ How would 2030 travel conditions change?

Regional Activity Centers



Intended to be focal points for jobs and housing, and nodes for transportation linkages.

Five Alternative Scenarios

- ✱ **“More Households” Scenario**
- ✱ **“Households In” Scenario**
- ✱ **“Jobs Out” Scenario**
- ✱ **“Region Undivided” Scenario**
- ✱ **Transit-Oriented Development” Scenario**



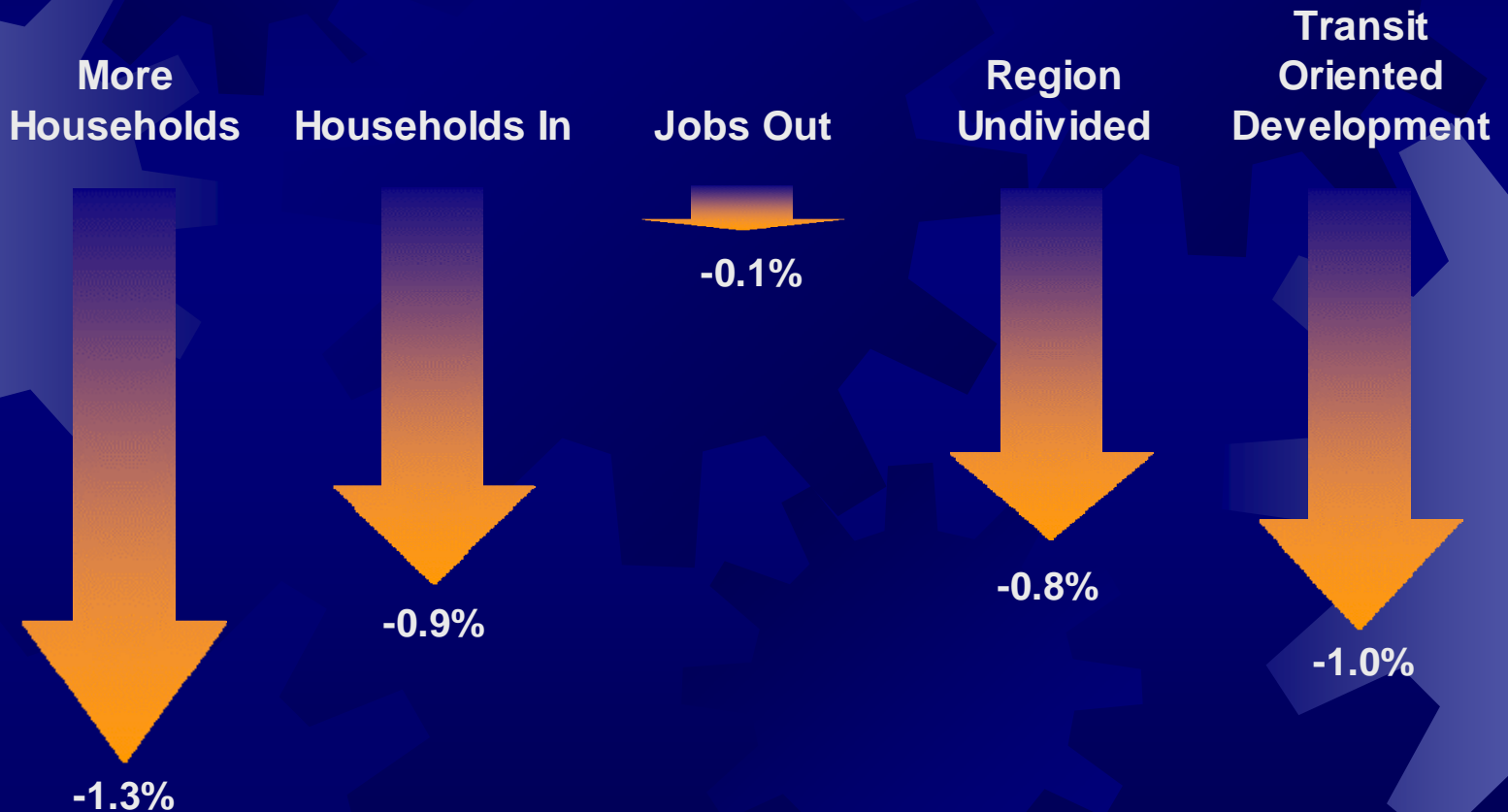
Evaluating the Scenarios:

How would future
travel conditions
change?

Driving would decrease

Compared to baseline forecasts for 2030

Vehicle Miles Traveled



Under the “More Households” scenario, the average person would drive 2 miles less per day . . .



Daily vehicle miles
traveled per person

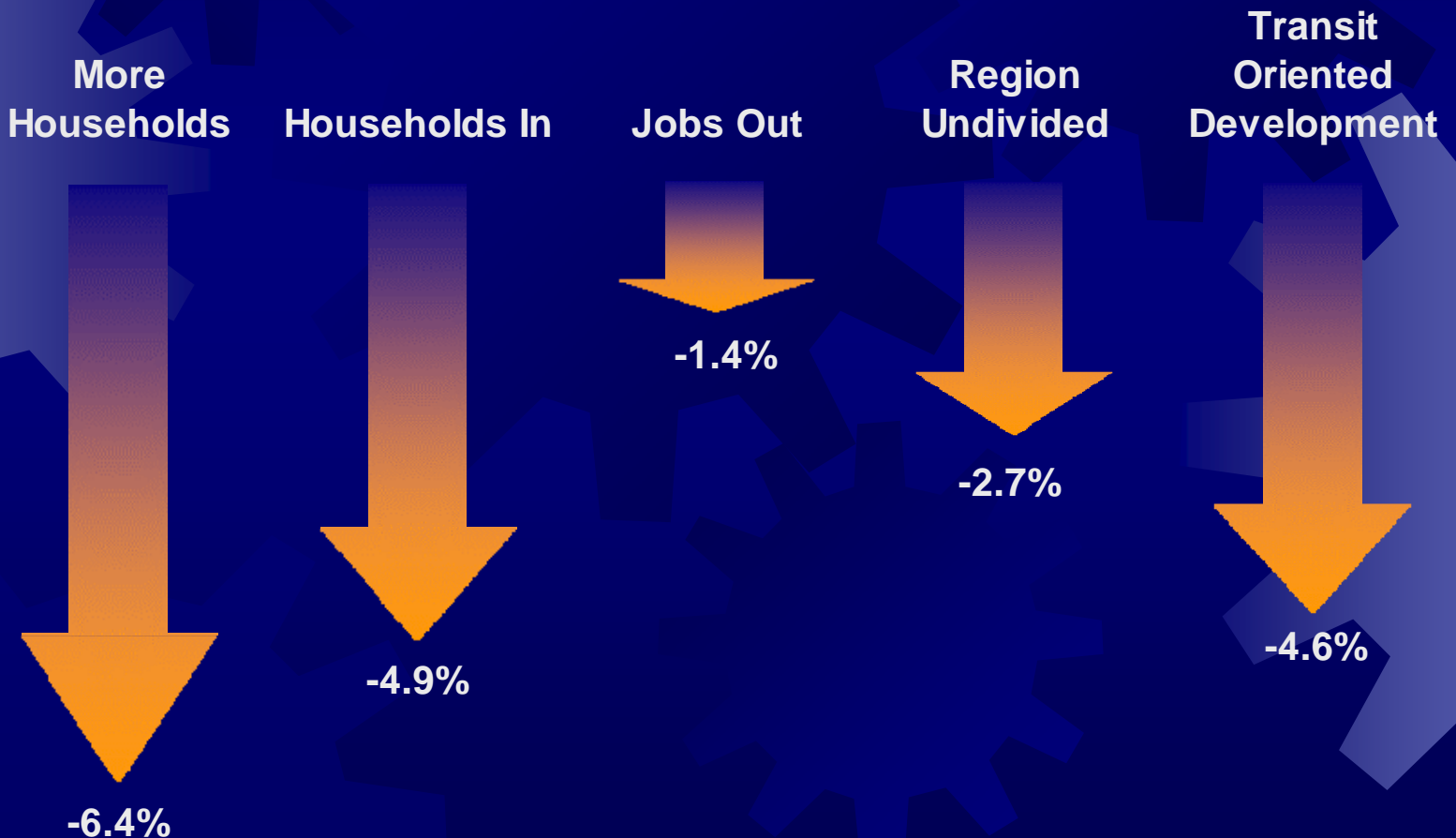
Baseline: **24**

“More Households”: **22**

Congestion would decrease

Compared to baseline forecasts for 2030

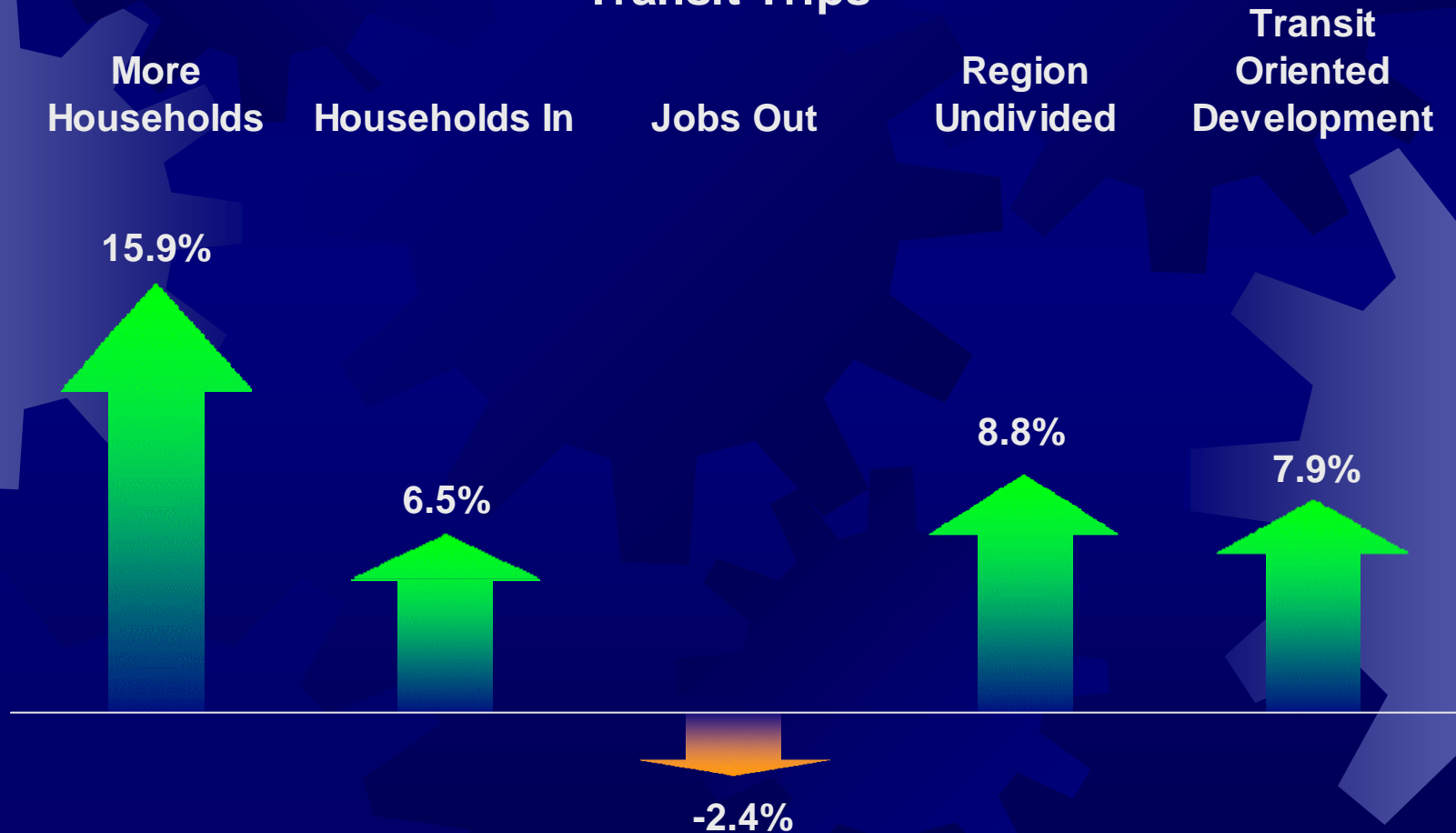
Lane Miles of Severe AM Peak Period Congestion



Transit use would increase^{*}

Compared to baseline forecasts for 2030

Transit Trips

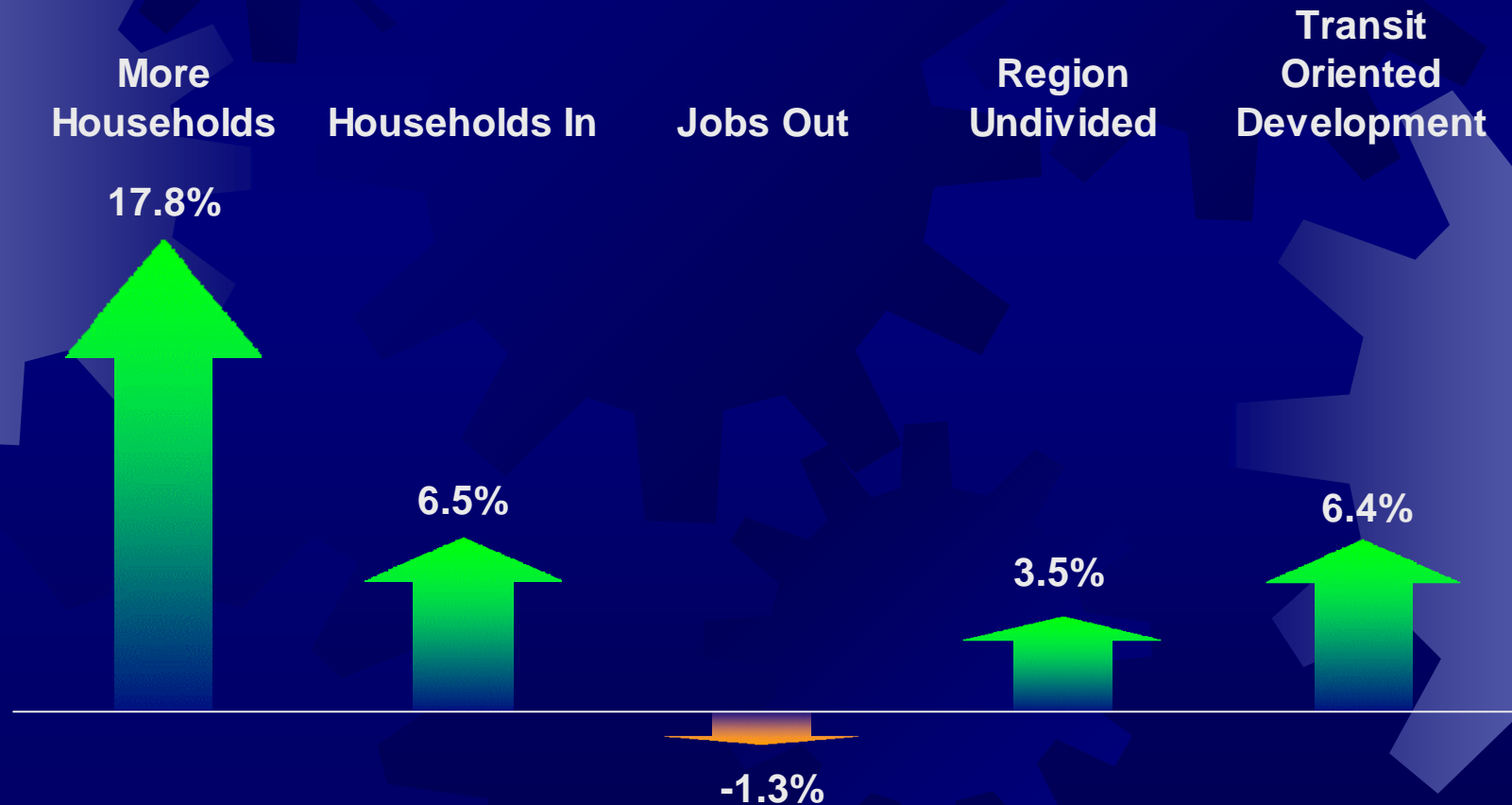


^{*}Under the "Jobs Out" scenario, transit trips would increase in outer suburban activity clusters

Walk and bike commuting would increase^{*}

Compared to baseline forecasts for 2030

Walk and Bike Commute Trips



^{*}Under the "Jobs Out" scenario, walk & bike commuting would increase in outer suburban activity clusters

Key Findings: What do the scenarios tell us?

- ✦ Increasing household growth and concentrating that growth in regional activity centers would
 - ↑ increase transit use, walking and biking
 - ↓ decrease driving and congestion

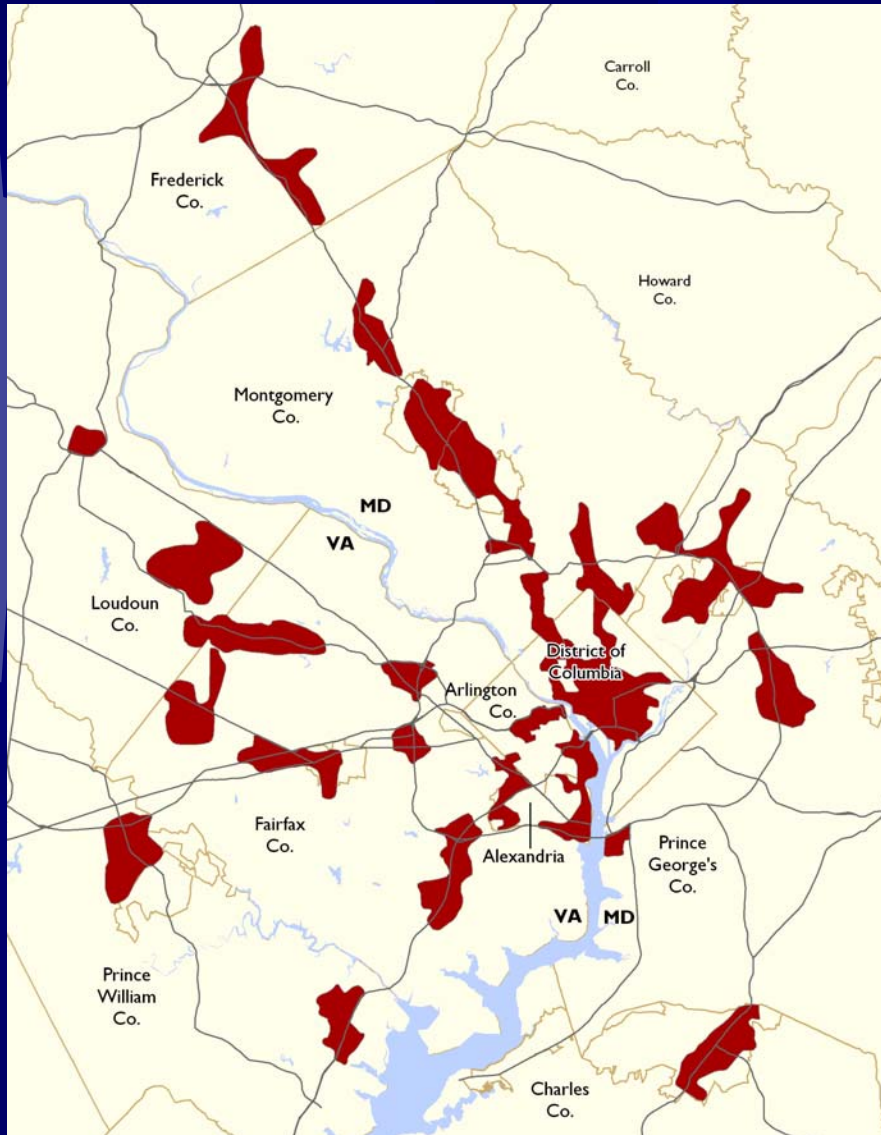
How has the study been used so far?

- Development of COG's Round 7.0 cooperative forecasts for population and employment growth

- Includes 2/3 of new households assumed under the "More Households" scenario



More Household Growth Now Planned for Regional Activity Centers



Regional Activity Center Clusters are now forecast to capture 42% of the region's future household growth, up from the 30% previously forecast

Scenario Study

Performance Measures

- ★ Jobs/Housing & Jobs/Workers ratios
- ★ % of future jobs and household growth in in regional activity centers
- ★ Jobs & households within $\frac{1}{4}$ and $\frac{1}{2}$ mile of a transit station
- ★ Spatial pattern of job and household growth
- ★ Land area used to accommodate 90% region's jobs and housing

Scenario Study Performance Measures (cont)

- ✱ Commuting travel modal shares
- ✱ Per Capita Vehicle Miles Traveled
- ✱ Highway and transit congestion levels
- ✱ Accessibility by travel mode
- ✱ Air Quality – mobile emissions
- ✱ Water Quality – Indicators



For More Info:

- ★ <http://www.mwcog.org/transportation/activities/regional/>